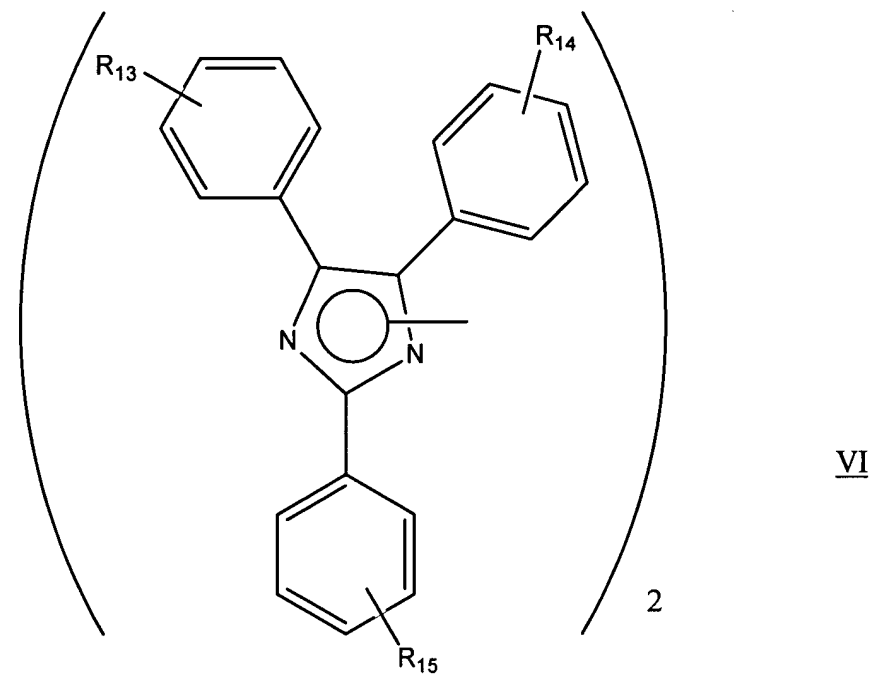


Listing of Claims

Claim 1 (currently amended): A compound comprising a photoinitiator joined to a hydrophilic carrier component, the photoinitiator is a hexaarylbiimidazole of the following formula:



wherein R₁₃, R₁₄ and R₁₅ are the same or different and comprise hydrogen, unsubstituted or substituted alkyl, unsubstituted or substituted aryl, alkoxy, aryloxy, hydroxyl, aminyl, carboxyl, ester, thio, isocyanate, -N(CH₂-OCH₃)₂, hydroxyalkyloxy or alkylthio with the proviso that at least one of R₁₃, R₁₄ or R₁₅ is a reactive group that undergoes an addition or a condensation reaction with a reactive group of the carrier component to join the carrier component to the photoinitiator, and R₁₅ also may be a halogen, and the hydrophilic carrier component comprises a monomer, oligomer, polymer, plasticizer or surfactant.

Claims 2 (cancelled)

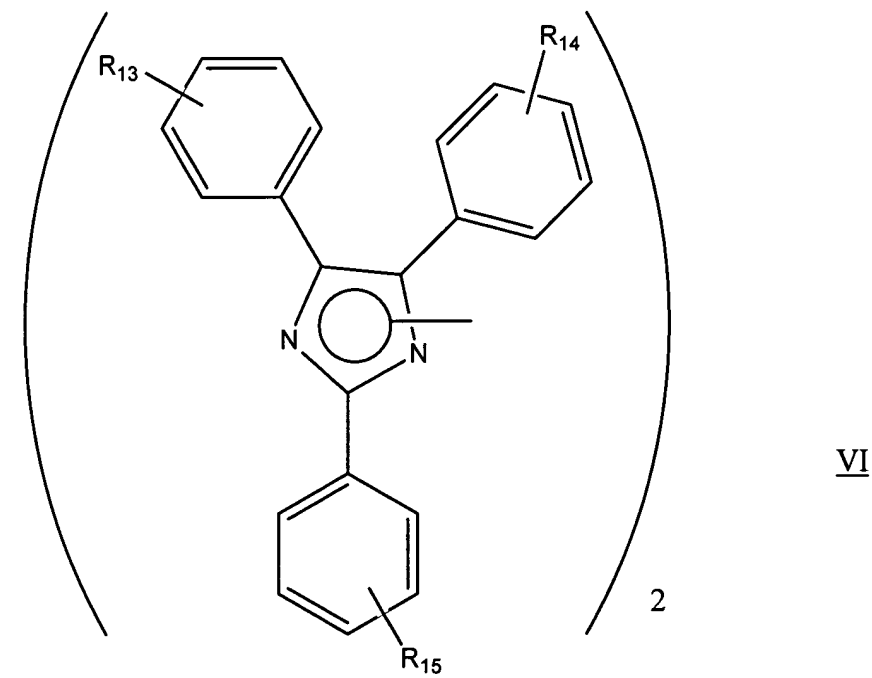
Claim 3 (previously presented): The compound of claim 1, wherein the monomer is an acid functional monomer or a non-acid functional monomer.

Claim 4 (previously presented): The compound of claim 1, wherein the oligomer is a urethane oligomer.

Claims 5-6 (cancelled)

Claim 7 (currently amended): The compound of claim 6 1, wherein R₁₃ or R₁₄ comprises hydroxyl, aminyl, (C₁-C₁₂)hydroxyalkyl, (C₁-C₁₂)aminylalkyl, or hydroxyalkyloxy, and R₁₅ is a halogen.

Claim 8 (currently amended): A photoresist comprising a compound with a photoinitiator joined to a hydrophilic carrier component, the photoinitiator is a hexaarylbiimidazole of the following formula:



wherein R₁₃, R₁₄ and R₁₅ are the same or different and comprise hydrogen, unsubstituted or substituted alkyl, unsubstituted or substituted aryl, alkoxy, aryloxy, hydroxyl, aminyl, carboxyl, ester, thio, isocyanate, -N(CH₂-OCH₃)₂, hydroxyalkyloxy or alkylthio with the proviso that at least one of R₁₃, R₁₄ or R₁₅ is a reactive group that undergoes an addition or a condensation reaction with a reactive group of the carrier component to join the carrier component to the photoinitiator, and R₁₅ also may be halogen, and the hydrophilic carrier component comprises a monomer, oligomer, polymer, plasticizer or surfactant.

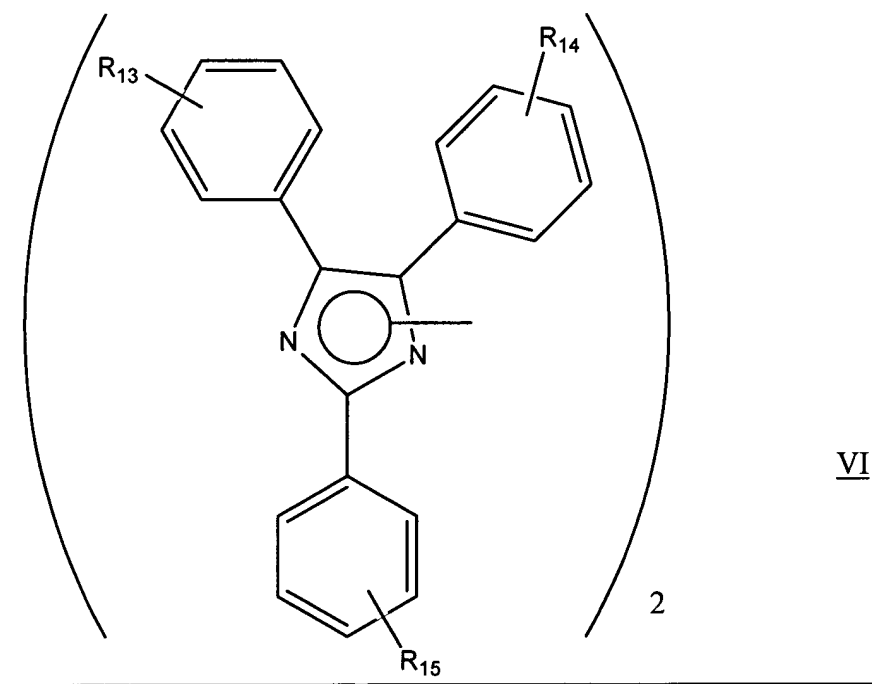
Claims 9-10 (cancelled)

Claim 11 (currently amended): The photoresist of claim ~~10~~ 8, wherein R₁₃ or R₁₄ comprises hydroxyl, aminyl, (C₁ to C₁₂)hydroxyalkyl, (C₁ to C₁₂)aminylalkyl, or hydroxyalkyloxy, and R₁₅ is a halogen.

Claim 12 (previously presented): The photoresist of claim 8, further comprising plasticizers, rheology modifiers, dyes, fillers, film forming agents, strip enhancers, or mixtures thereof.

Claim 13 (currently amended): A method of forming a pattern on a substrate comprising:

- a) disposing on a substrate a photoresist composition with a hydrophilic carrier component bonded to a photoinitiator component, the photoinitiator component is a hexaarylbiimidazole of the following formula:



wherein R₁₃, R₁₄ and R₁₅ are the same or different and comprise hydrogen, unsubstituted or substituted alkyl, unsubstituted or substituted aryl, alkoxy, aryloxy, hydroxyl, aminyl, carboxyl, ester, thio, isocyanate, -N(CH₂-OCH₃)₂, hydroxyalkyloxy or alkylthio with the proviso that at least one or R₁₃, R₁₄ or R₁₅ is a reactive group which may undergo an addition or condensation reaction with a reactive group of the carrier component to join the photoinitiator to the carrier component, and R₁₅ also may be halogen, and the hydrophilic carrier component comprises a monomer, oligomer, polymer, plasticizer or surfactant;

- b) imaging the photoresist; and
c) developing the photoresist.

Claims 14-15 (cancelled)

Claim 16 (currently amended): The method of claim ~~15~~ 13, wherein R_{13} or R_{14} comprises hydroxyl, aminyl, $(C_1 \text{ to } C_{12})$ hydroxylalkyl, $(C_1 \text{ to } C_{12})$ aminylalkyl, or hydroxyalkyloxy, and R_{15} is a halogen.

Claim 17 (previously presented): The method of claim 13, wherein the substrate is a printed wiring board.